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09/630,024	07/31/2000	Kevin L. Farley	TAN-2-1502.01.US	4041

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EXAMINER	
CHAN, RICHARD	

ART UNIT	PAPER NUMBER
2618	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/630,024	FARLEY ET AL.	
	Examiner	Art Unit	
	RICHARD CHAN	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 June 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *44-72* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *44-72* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date. _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 6/12/08 have been fully considered but they are not persuasive.

Regarding applicant's arguments to independent claim 44, the applicant submits the Emilsson reference does not specifically disclose wherein "multicast group paging message indicating an allocated single wireless channel".

The applicant states *"According to Emilsson, a coding device is configured in the network to encode subscriber-specific data by a key to a code. A data transmission device is configured on the network to transmit encoded data on a data channel that is arranged for cell broadcast service. (Emilsson, page 5, lines 11-21.) Mobile devices that are subscribers to the broadcast service include decoding devices. The decoding devices decode the data with a key that is symmetric to the key used to encode the data. (Emilsson, page 5, lines 21-29.) Emilsson also discloses a method substantively identical to the devices just described. (Emilsson, page 5, line 32 - page 6, line 6.) According to Emilsson, this device and method are applicable to any telephone standard which can manage broadcast information to phones, and information of current interest can be limited to a geographical area. (Emilsson, page 6, lines 25- 29.)"*

The applicant fails to continue to cite within the Emilsson reference wherein "Data transmission device is arranged in the fixed network, adapted to **broadcast transmission of subscriber specific data** (interpreted by the examiner as the which have been encoded by said coding, on one for cell broadcast service arranged **data channel on said broadcast carrier**."

The examiner however respectfully disagrees with the applicant's assertion. The examiner points the applicant back to the Emilsson reference wherein the multigroup paging message is interpreted as the "coding device encoding in the fixed network by a key to a code." This code then provides the subscriber unit to access data within a specific channel that is transmitted to many subscribers.

Regarding applicant's arguments regarding the transmission of they key is not included with a "paging" message. The applicant's own specification page 5 and 7, describe the paging message as a "common to all subscriber access units 14 that is used to provide communication with subscriber access units 14 when no dedicated wireless traffic channels are allocated to send and receive messages. In such a system, a common paging channel is used to notify a subscriber access unit that is being allocated a traffic channel."

The applicant fails to specifically disclose within the claim language wherein the paging message is not a message that is transmitted to all subscribers. Therefore it is known to one of ordinary skill in the art to interpret the

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 44, 49, 59 rejected under 35 U.S.C. 103(a) as being unpatentable over Shaughnessy (US 6,141,347) in view of Emilsson (WO 01 82645).

With respect to claim 44, 49, and 59, Shaughnessy discloses the method implemented in a subscriber unit associated with a wireless network, wherein two or more subscriber units form a multicast group (see Col.5, lines 13020, col.5 lines 60-67, col.6 lines 7-12, col.7 lines 32-52, col.3 lines 7-33, col.4 lines 17-42, col.4 lines 62-67, col.5 lines 1-13, where Shaughnessy discusses that the base sites act as packet routers for by directional message transfer for groups in their area) however the Shaughnessy reference does not specifically disclose wherein the method comprising: receiving a paging message, via one of a plurality of wireless channels, indicating an allocated single wireless channel associated with one or more connection identifiers over which to receive a multicast message, wherein the paging message is sent to the multicast group.

In related art, Emilsson teaches each user terminal is informed in a paging message sent to the user terminal in advance as to which channel to receive the combined message (specifically, a paging message indicative of said allocated wireless channel over which to receive the multicast message, see Emilsson page 5, lines 11-21, page 5, line 32- page 6, line 6 and page 6, lines 25-29. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy (as modified above by Langlet) by having a paging message indicative of said allocated wireless channel over which to receive the multicast message, as

taught by Emilsson, in order to assist in billing when figuring out utilizations of service by a user's mobile telephone.

4. Claims 45-50, 53-57, 62-64, and 68-72 and 60 rejected under 35 U.S.C. 103(a) as being unpatentable over Shaughnessy (US 6,141,347) in view of Emilsson (WO 01 82645) in view of Langlet (US 5,930,248).

With respect to claims 45, 46, 61 and 65 Shaughnessy discloses receiving said message at each of the plurality of multicast group members (see col. 4 lines 17-67, col. 5 lines 1-21, col. 7 lines 32- 67 and col. 8 lines 1-13 col. 5 lines 13-20, col. 7 lines 32-67, and col. 8 lines 1-25). Shaughnessy discloses sending messages to talk groups associated by identifiers (col. 3 lines 5-33) however does not specifically discloses the same one of said wireless channels. Langlet teaches the same one of said wireless channels (see col. 5, line 34- col. 6, line 11 & col. 6, lines 55-64, where Langlet is discussing using one channel just for multicast messages).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy, and have the same one of said wireless channels used to send said multicast message to said plurality of multicast group members, as taught by Langlet, thus modifying the system to operate according to third generation standards for mobile communication systems, as discussed by Langlet.

With respect to claims 47, 48, 62, and 63 Shaughnessy discloses sending messages to talk groups associated by identifiers (col. 3 lines 5-33) however does not specifically discloses, channels dedicated to transmitting multicast messages, wherein the allocated single wireless channel is a dedicated channel.

Langlet teaches channels dedicated to transmitting multicast messages, wherein the same one of said wireless channels is used to send said multicast message to said plurality of multicast group members (see col. 5, line 34- col. 6, line 11 & col. 6, lines 55-64, where Langlet is discussing using one channel just for multicast messages).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy, and channels dedicated to transmitting multicast messages, wherein the same one of said wireless channels is used to send said multicast message to said plurality of multicast group members, as taught by Langlet, thus modifying the system to operate according to third generation standards for mobile communication systems, as discussed by Langlet.

With respect to claim 49, 56, and 71, Shaughnessy discloses a method of multicasting messages in a wireless network (see col. 1 lines 9-12). Shaughnessy discloses receiving at a base station processor having a plurality of wireless channels a multicast message addressed to a multicast group having one or more members (see col. 5, lines 13-20, col. 5 lines 60-67, col. 6 lines 7-12, col. 7 lines 32-52, col. 3 lines 7-33, col. 4 lines 17-42, col. 4 lines 62-67, col. 5 lines 1-13, where Shaughnessy

discusses that the base sites act as packet routers for by directional message transfer for groups in their area). Shaughnessy discloses determining a plurality of multicast group members (see col. 4 lines 17-67, col. 5 lines 1-21, col. 7 lines 32-67 and col. 8 lines 1-13).

Shaughnessy discloses sending, over one of said wireless channels, said multicast message, wherein said wireless channels are used to simultaneously send said multicast message to said plurality of multicast group members (see col. 5 lines 13-20, col. 7 lines 32-67, and col. 8 lines 1-25).

Shaughnessy discloses sending messages to talk groups associated by identifiers (col. 3 lines 5-33) however does not specifically discloses, channels dedicated to transmitting multicast messages, wherein the same one of said wireless channels is used to send said multicast message to said plurality of multicast group members.

Langlet teaches channels dedicated to transmitting multicast messages, wherein the same one of said wireless channels is used to send said multicast message to said plurality of multicast group members (see col. 5, line 34- col. 6, line 11 & col. 6, lines 55-64, where Langlet is discussing using one channel just for multicast messages).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy, and channels dedicated to transmitting multicast messages, wherein the same one of said wireless channels is used to send said multicast message to said plurality of multicast group members, as

taught by Langlet, thus modifying the system to operate according to third generation standards for mobile communication systems, as discussed by Langlet.

Furthermore, Shaughnessy as modified by Langlet above fail to specifically disclose a paging message indicative of said allocated wireless channel over which to receive the multicast message. In related art, Emilsson teaches each user terminal is informed in a paging message sent to the user terminal in advance as to which channel to receive the combined message (specifically, a paging message indicative of said allocated wireless channel over which to receive the multicast message, see Emilsson page 5, lines 11-21, page 5, line 32- page 6, line 6 and page 6, lines 25-29.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy (as modified above by Langlet) by having a paging message indicative of said allocated wireless channel over which to receive the multicast message, as taught by Emilsson, in order to assist in billing when figuring out utilizations of service by a user's mobile telephone.

With respect to claim 50, Shaughnessy step 503 discloses transmitting the multicast message. (Col.5 line 60-63)

With respect to claim 64, Shaughnessy discloses a base station for multicasting messages in a wireless network comprising a processor configured to: (see col. 1 line 9-12). Shaughnessy discloses a base station processor having a plurality of wireless

channels operable to transmit a wireless message; and a plurality of subscriber access units in communication with receiving at a base station processor having a plurality of wireless channels a multicast message addressed to a multicast group having one or more members (see col. 5, lines 13-20, col. 5 lines 60-67, col. 6 lines 7-12, col. 7 lines 32-52, col. 3 lines 7-33, col. 4 lines 17-42, col. 4 lines 62-67, col. 5 lines 1-13, where Shaughnessy discusses that the base sites act as packet routers for by directional message transfer for groups in their area).

Shaughnessy discloses said base station processor is operable to receive a multicast message and simultaneously transmit said multicast message to at least one of said plurality of subscribers access units via the plurality of wireless channels (see col. 4 lines 17-67, col. 5 lines 1-21, col. 7 lines 32-67 and col. 8 lines 1-13, see col. 5 lines 13-20, col. 7 lines 32-67, and col. 8 lines 1-25). Shaughnessy discloses sending messages to talk groups associated by identifiers (col. 3 lines 5-33) however does not specifically discloses one of said plurality of wireless channels dedicated to transmitting multicast messages. Langlet teaches one of said plurality of wireless channels dedicated to transmitting multicast messages (see col. 5, line 34- col. 6, line 11 & col. 6, lines 55-64, where Langlet is discussing using one channel just for multicast messages).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy, and have one of said plurality of wireless channels dedicated to transmitting multicast messages, as taught by

Langlet, thus modifying the system to operate according to third generation standards for mobile communication systems, as discussed by Langlet. Furthermore, Shaughnessy as modified by Langlet above fail to specifically disclose a paging message indicative of said allocated wireless channel over which to receive the multicast message.

In related art, Emilsson teaches each user terminal is informed in a paging message sent to the user terminal in advance as to which channel to receive the combined message (specifically, a paging message indicative of said allocated wireless channel over which to receive the multicast message, see Emilsson page 5, lines 11-21, page 5, line 32- page 6, line 6 and page 6, lines 25-29.

With respect to claims 53 -55 and 68-70 Shaughnessy scanning the multicast message; and parsing a group address to determine if the multicast message is for the multicast group. (Col.1 lines 14-54, Col.3 line 34-67, and col.4 line 1-18)

With respect to claims 57 and 72, Emilson comprising: receiving a negative acknowledgment from the one or more subscriber units from the multicast group; and resending the multicast message to the multicast group in response to the negative acknowledgement. (specifically, a paging message indicative of said allocated wireless channel over which to receive the multicast message, see Emilsson page 5, lines 11-21, page 5, line 32- page 6, line 6 and page 6, lines 25-29)

5. Claims 51, 52, 58, 66 and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaughnessy and Langlet in view of Emilsson (WO 0 i 82645) as applied to claims 1, 13, and 29-31, above, and further in view of Pan et al. (6,308,079).

With respect to claims 51 and 66, Shaughnessy discloses the method and system, as modified by Langlet above. Shaughnessy discloses several talk-groups forming variable sets groups, where the subsets are other groups of the first or other groups (see col. 4 lines 17-42). Shaughnessy and Langlet do not specifically disclose another method of talk-groups with subsets of other groups including subsets such that some are listening groups.

Pan teaches another method of talk-groups with subsets of other groups including subsets such that some are listening groups (see col. 2 lines 49-67).
It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Shaughnessy and Langlet, and have another method of talk-groups with subsets of other groups including subsets such that some are listening groups as taught by Pan, thus allowing multiple user to simultaneously broadcast, as discussed by Pan (col. 2 lines 19-25).

With respect to claim 52 and 67, the above combination discloses lookup and routing tables.

With respect to claim 58, Shaughnessy discloses the method of claim 49 wherein only the multicast group decodes the multicast message transmitted over the single wireless channel.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to RICHARD CHAN whose telephone number is (571)272-0570. The examiner can normally be reached on Mon - Fri (9AM - 5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on (571)272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Richard Chan/
Examiner, Art Unit 2618

/Nay A. Maung/
Supervisory Patent Examiner, Art Unit 2618